PIN64
COST-EFFECTIVENESS OF DOLUTEGRAVIR/ABACAVIR/LAMIVUDINE IN HIV-1 TREATMENT NAIVE PATIENTS IN FRANCE
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OBJECTIVES: To evaluate the cost-effectiveness of an integrase inhibitor (INI), dolutegravir (DTG), in combination with abacavir(ABC)/lamivudine(3TC) in France, in treatment-naïve (TN) HIV adult patients. **METHODS:** The ARAMIS microsimulation Markov model, including HIV health states with and without opportunistic infection, evaluates costs and effects of first line options including INIs (raltegravir [RAL], elvitegravir/c), protease inhibitors (PI) (darunavir [DRV/r], atazanavir/r, lopinavir [LPV/r]), efavirenz (EFV) and rilpivirine at a life time horizon with a monthly cycle length. Efficacy and safety data were derived from phase III studies (SPRING 2, FLAMINGO and SINGLE including comparators RAL, DRV/r and EFV respectively) and network meta-analyses for other comparators. Treatment algorithms were based on French guidelines and experts opinion accounting for patient's treatment history, including INI resistance status. Costs, from a collective perspective included routine HIV and opportunistic infection care, and death. **RESULTS:** The model showed DTG/ABC/3TC was more effective than all other recommended regimens: patients stayed longer on first line, and lived longer and healthier (incremental life years ranged from 0.305 to 0.71 and QALYs from 0.085 to 0.28 versus RAL and LPV/r). With the exception of EFV, DTG was dominant compared to all strategies, with the largest cost savings for INIs (incremental costs of -€21,556 for RAL). The cost per QALY gained (ICER) for DTG compared to EFV was €6,939 (incremental QALYs and costs of 0.10 and +€692, respectively). Deterministic sensitivity analyses (DSA) showed that DTG was dominant compared to INIs and PIs in all DSA. Compared to EFV, the ICER was most sensitive to time horizon, resistance parameters, and late failure probability. **CONCLUSIONS:** DTG/ABC/3TC is cost-effective in the management of HIV TN patients in France. These results are mainly explained by the lower price of DTG/3TC/ABC compared to INIs and PIs, DTG's superior efficacy and high barrier to resistance.

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COST EFFECTIVENESS ANALYSIS OF THE USE OF DACLATASVIR FOR THE TREATMENT OF HEPATITIS C VIRUS (HCV) GENOTYPES 3 IN CIRRHOTIC PATIENTS WITHIN THE ITALIAN NATIONAL HEALTH SERVICE
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OBJECTIVES: The development of new highly effective therapies for the treatment of hepatitis C virus (HCV), leads to the opportunity to eradicate this infection. In a context characterized by a high prevalence of this pathology (i.e. Italy) the investigation of the most efficient therapies to allocate resources to, is crucial. The aim of the study was to investigate the cost-effectiveness of Daclatasvir+Sofosbuvir+Ribavirine therapy, compared with Sofosbuvir+Ribavirine+Peginterferone therapy for the treatment of HCV genotype 3 infection in cirrhotic patients within the Italian National Health Service. **METHODS:** A published cohort-based Markov simulation model (Monarch model) was used to perform lifetime horizon analyses assuming the Italian National Health Service point of view. The model simulates the natural history of HCV infection and its complications. Patient cohorts were defined based on selected clinical studies and eligibility criteria defined by the Italian Medicines Agency. The comparator was selected considering EASL guidelines published in 2015. The costs considered (2015) were direct medical costs, including adverse events costs. Utility values were influenced by health status and adverse events (anemia, rash, insomnia, headache, fatigue, nausea, diarrhea). Both costs and utility values were discounted using a 3% rate. **RESULTS:** Daclatasvir+Sofosbuvir+Ribavirine for 24 weeks (100% sustained virological response – registry trial) would lead to a per capita increase of quality adjusted life years (QALYs) (12.46 vs. 12.10) and costs (56,318 € vs. 41,881 €) compared with Sofosbuvir+Ribavirine+Peginterferone for 12 weeks (92.06% sustained virological response – PROTON, ELECTRON, LONESTAR studies). The incremental cost effectiveness ratio (ICER) is 39,614 €/QALY. **CONCLUSIONS:** Daclatasvir+Sofosbuvir+Ribavirine therapy is likely to be cost effective compared with Sofosbuvir+Ribavirine+Peginterferone in genotype 3 HCV infected cirrhotic patients, leading to an ICER below the 40,000 €/QALY threshold identified by the Italian Association of Health Economics.

PIN66
COST EFFECTIVENESS OF BEDAQUILINE FOR PATIENTS WITH MULTI-DRUG RESISTANT TUBERCULOSIS IN SOUTH KOREA
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OBJECTIVES: Bedaquiline is a newly introduced agent for the treatment of multidrug-resistant tuberculosis (MDR-TB) and this study aimed to evaluate the cost effectiveness of adding bedaquiline to a standard regimen (SR) to treat patients with MDR-TB, including extensively drug resistant tuberculosis (XDR-TB) in comparison with standard regimen alone in South Korea. **METHODS:** A cohort based decision analytic model developed in a previously published study from the UK was used with the following parameters: a 20 year time horizon, and a 5% discount rate for cost and effectiveness to evaluate incremental cost-effectiveness ratios (ICER) of bedaquiline plus SR and SR alone. Key parameters on clinical data were based on the published Phase 2trial of bedaquiline and other parameters for recurrence, cured, lost follow-up, surgery, death, cost and health utility were based on Korean data if available, otherwise the international literature data were applied. Univariate and probabilistic sensitivity analyses were conducted. **RESULTS:** A patient on bedaquiline plus SR regimen had 1.20 quality adjusted life years (QALYs) longer with 13,961,659KRW (1,100 KRW=1 USD) additional cost spent compared to a patient in SR alone with an incremental cost-utility ratio (ICUR) of 11,638,656KRW/QALY. Bedaquiline plus SR had a 80% probability of being cost-effective at a willingness to pay threshold of 26,000,000KRW when compared with SR alone. **CONCLUSIONS:** The results of this study indicate that bedaquiline is a cost-effective option for the treatment of MDR (including XDR-TB patients) in the Korean settings when compared to standard treatment alone.

PIN67
ASSESSMENT OF COMPLIANCE AND AVOIDED COSTS AFTER IMPLEMENTATION OF EQUIVALENT TERAPEUTIC PROGRAM FOR CANDIDA INFECTION TREATMENT
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OBJECTIVES: The main objetive was to evaluate the cost reduction by introduction of equivalent therapeutic program after the accord in the Central Pharmaceutical Commission in Extremadura. **METHODS:** Retrospective observational study between March 2013 and March 2014. We agree that micafungin was the preferential echinocandin for the same indication. Caspofungin was restricted for empiric treatment of fungal infection in patients with fever and neutropenia and Anidulafungin was used in patients with hepatic dysfunction. To quantify the avoided costs we extracted consumption data and costs of antifungals from the Pharmacy Department Multibase v.3. Program (Dominion) and compared them with the same period the previous year. **RESULTS:** Regarding avoided costs for the period of the study, echinocandins costs were reduced by 353.965 euros, a 24,35 % less than previous year. In the first period, the echinocandin most used was caspofungin (51,23%) because the prescription wasn´t restricted and the physician could use anyone. In the second period, we observed a 31,63% increase in use in micafungin, the echinocandin that we evaluated the most efficient in our protocol. The use of caspofungin and anidulafungin decreased a 11,92% and 19,71% respectively. These use involved a decrease in cost too, 255.836 and 254.896 euros less about anidulafungin and caspofungin use respectively. These results are consistent with the recommendations contained in our program (first line use of micafungin in nonimmunosuppressed patients with candida infection). **CONCLUSIONS:** Our therapeutic program compliance was good at our hospitals, resulting in a significant decrease in echinocandins expenses. Maybe, the implementation of these type of programs in the management of high-cost drugs resulted in significant cost reductions and therefore in a more rational use of healthcare budgets.

PIN68
COST ANALYSIS OF RESIDUAL VIREMIA DETECTED BY TWO REAL-TIME PCR ASSAYS FOR RESPONSE-GUIDED (DUAL OR TRIPLE) THERAPY OF HCV GENOTYPE 1 INFECTION
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OBJECTIVES: The duration of current standard dual and triple therapies for HCV-G1 is determined by assessment of early viral kinetics. We conducted a cost analysis to determine the main cost of treatment for a patient with HCV-G1 with dual or triple therapy, where the duration of the therapy (24 or 48 weeks) is guided by HCV-RNA assay. **METHODS:** HCV-RNA was assessed by two widely used real-time PCR-based assays, Cobas Ampliprep/Cobas TaqMan (CAP-CTM) and Real-Time HCV (ART). Considering the dual therapy (PegINFα-2b and RBV) at week 12 of treatment, 16% of patients (27/169) were eligible to receive a shorter duration of therapy (24 weeks) according to CAP-CTM and 9% (16/169) to ART: 26 patients achieved SVR with CAP-CTM and 15 with ART. Considering the triple therapy (TPV, PegINFα-2a and RBV) at week 12 of treatment, 60% of patients (31/52) were eligible to receive a shorter duration of therapy (24 weeks) according to CAP-CTM and 25% (13/52) to ART: 30 patients achieved SVR with CAP-CTM and 13 with ART. The cost analysis was conducted from the perspective of the Italian National Health Service (NHS). Only drugs (TPV, PegINFα-2b, PegINFα-2b and RBV) and tests (CAP-CTM and ART) costs were considered. Ex-factory prices (included all discounts) and National Tariffs were considered to appraise drug consumptions and tests, respectively. Costs were assessed in Euros in 2015. **RESULTS:** Considering the dual therapy, the overall main treatment cost per patient with CAP-CTM (€9,743.63) was lower than with ART (€10,053.46). Taking into account the triple therapy, the overall main treatment cost per patient was lower with CAP-CTM (€31,630.69) than with ART (€33,463.24). **CONCLUSIONS:** CAP-CTM HCV-RNA assay was cost-saving from the Italian NHS perspective compared to ART HCV-RNA assay in dual (-€309.83 cost per patient) and triple (-€1,832.55 cost per patient) HCV therapy.

PIN69
HIGH-DOSE INACTIVATED INFLUENZA VACCINE CAN REDUCE COSTS AND IMPROVE OUTCOMES COMPARED TO STANDARD-DOSE INACTIVATED INFLUENZA VACCINE IN CANADIAN SENIORS
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OBJECTIVES: Adults ≥65 years account for most seasonal influenza-related hospitalizations and deaths. A recent head-to-head RCT (FIM12, NCT01427309) demonstrated that a high-dose influenza vaccine (HD) was 24.2% more efficacious than a standard-dose influenza vaccine (SD) in preventing laboratory-confirmed influenza-like illness among 31,989 adults ≥65 years. A cost-utility analysis (CUA) of HD vs. SD in FIM12 participants was performed. **METHODS:** Health-care resource utilization data collected in the FIM12 study utilized resources (medications, non-routine medical visits, emergency room visits, and hospitalizations) were summarized across vaccine arms and unit costs were applied, using standard Canadian cost sources (in CAD), to each resource item (including vaccines; HD $31.82; SD $5.82) to estimate the mean total direct medical and societal costs associated with each vaccine. Health outcomes data